What is claimed is:

1. An electro-luminescence device comprising:

a plurality of column lines supplied with data;

a plurality of row lines crossing the column lines for selecting a scan line;

at least one electro-luminescence cell each formed at a pixel area between the column lines and the row lines; and

a cell drive voltage source for applying a drive voltage to the electro-luminescence cell, and

wherein a cathode terminal of the electro-luminescence cell is selectively connected between a cathode voltage source and a ground voltage source to have a reverse bias voltage selectively applied to the cathode terminal.

2. The organic electro-luminescence device according to claim 1, further comprising:

a switch selectively connecting the cathode terminal of the electro-luminescence cell to the cathode voltage source or the ground voltage source.

3. The organic electro-luminescence device according to claim 2, wherein the switch is switched between the cathode voltage source and the ground voltage source within a designated period per frame.

4. The organic electro-luminescence device according to claim 2, wherein the switch is switched within each 1/2 frame period.

5. The organic electro-luminescence device according to claim 2, wherein the switch is switched at an asymmetric period point within each frame period.

6. The organic electro-luminescence device according to claim 1, further comprising:

a first switching device formed at each intersection area of the column lines and the row lines;

a second switching device formed between the electro-luminescence cell and the cell driver voltage source for driving the corresponding electro-luminescence cell; and

a capacitor connected between the first and second switching devices and the cell drive voltage source.

7. The organic electro-luminescence device according to claim 6, wherein a common voltage supplied from the common voltage source is set to be higher than a total voltage obtained by adding a threshold voltage of the electro-luminescence cell after subtracting a threshold voltage of the second switching device from a cell drive voltage of the cell drive voltage source.

8. The organic electro-luminescence device according to claim 6, wherein the first and second switching devices are thin film transistors.

9. The organic electro-luminescence device according to claim 8, wherein the first and second switching devices are MOS TFT's.

10. The organic electro-luminescence device according to claim 9, wherein the first and second switching devices are either n-type MOS TFT's or p-type MOS TFT's.

11. The organic electro-luminescence device according to claim 1, further comprising:

a first switching device formed at each intersection area of the column lines and the row lines and connected between the cell drive voltage source and the corresponding electro-luminescence cell;

a second switching device forming a current mirror with the first switching device and connected to the cell driver voltage source;

a third switching device connected to the second switching device, the corresponding column line and the corresponding row line for responding to a data signal in the corresponding row line;

a fourth switching device connected to the second and third switching devices and the row line; and

a capacitor connected between the first and second switching devices and the cell drive voltage source.

12. The organic electro-luminescence device according to claim 11, wherein a common voltage supplied from the common voltage source is set to be higher than a total voltage obtained by adding a threshold voltage of the electro-luminescence cell after subtracting a threshold voltage of the second switching device from a cell drive voltage of the cell drive voltage source.

13. The organic electro-luminescence device according to claim 11, wherein the first to fourth switching devices are thin film transistors.

14. The organic electro-luminescence device according to claim 13, wherein the first to fourth switching devices are MOS TFT's.

15. The organic electro-luminescence device according to claim 14, wherein the first to fourth switching devices are either n-type MOS TFT's or p-type MOS TFT's.

16. An apparatus for driving an organic electro-luminescence device, the apparatus comprising:

an electro-luminescence display panel having m×n number of electro-luminescence pixel units at intersections of m number of row lines and n number of column lines;

a data driver driving the column lines;

a scan driver driving the row lines;

a timing controller applying a scan control signal for driving the row lines to the scan driver and applying a column control signal together with a video data signal to the data driver; and

a power supplier applying a drive voltage to the display panel, the data driver, the scan driver and the timing controller, and applying a cathode voltage to a cathode terminal of an electro-luminescence cell within at least one electro-luminescence pixel unit.

17. The apparatus according to claim 16, wherein the power supplier supplies the cathode voltage to the cathode terminals of all the electro-luminescence cells in the display panel, simultaneously.

18. The apparatus according to claim 16, further comprising:

a cathode voltage driver receiving the cathode voltage from the power supplier and selectively applying the cathode voltage to one or more of the cathode terminals of the electro-luminescence cells in the display panel.

19. The apparatus according to claim 18, wherein the cathode voltage driver applies the cathode voltage to one or more of the cathode terminals in accordance with a control signal supplied by the timing controller.

20. The apparatus according to claim 18, wherein the cathode voltage driver applies the cathode voltage to all the electro-luminescence cells in one row of the display panel, simultaneously.

21. The apparatus according to claim 16, further comprising:

a system controller controlling the timing controller and transmitting a video data from an external source; and

a video supplier connected to the system controller and the power supplier for inputting the video data and applying each control signal to the system controller.

22. A method for driving an organic electro-luminescence device having an electro-luminescence cell, a cell drive voltage source for driving the electro-luminescence cell in response to data formed at each pixel area between a plurality of column lines supplied with data and a plurality of row lines for selecting a scan line, and a switch selectively connecting a cathode terminal of the electro-luminescence cell to a cathode voltage source and a ground voltage source, the method comprising:

connecting the switch to the cathode voltage source;

applying the data to the column lines;

applying a scan voltage synchronized with the data to the row lines; and

switching the switch to the ground voltage source.

23. The method according to claim 22, wherein the step of applying the scan voltage to the row lines includes:

charging a capacitor with the supplied data through a switching device.

24. The method according to claim 23, wherein the step of switching the switch to the ground voltage source includes:

applying a voltage charged in the capacitor to the switching device connected between the cell drive voltage source and the electro-luminescence cell;

adjusting a current path width of a source and a drain terminal of the switching device by the applied data voltage; and

causing the electro-luminescence cell to emit light by a voltage difference between the cell drive voltage source and the ground voltage source corresponding to the applied data voltage.

25. The method according to claim 22, wherein the switch is switched within each 1/2 frame period.

26. The method according to claim 22, wherein the switch is switched at an asymmetric period point of each frame period.